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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,494	12/14/2001	Bill Kwong	BHT-3092-254	9991

7590 07/30/2003  
BRUCE H. TROXELL  
SUITE 1404  
5205 LEESBURG PIKE  
FALLS CHURCH, VA 22041

EXAMINER

EDWARDS, ANTHONY Q

ART UNIT	PAPER NUMBER
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2835

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/014,905

Applicant(s)

TANZER ET AL

Examiner

Anthony Q. Edwards

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8, 9 and 11 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 07 July 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. Re. 36,968 to Shieh in view of U.S. Patent No. 6,154,360 to Kaczeus, Sr. et al. Shieh discloses a “universal” hard disk cartridge (see column 1, lines 35-40) for inserting a removable hard drive (12) and connecting to a I/O port of a personal computer by an interface cable (see FIG. 3) comprising: a universal hard disk cartridge housing (3) and a hard disk connecting/printed circuit board (6) connected to the universal hard disk cartridge housing (3) such that a portion of the hard disk connecting board/printed circuit board (6) extends out of a first side of the universal hard disk cartridge housing (see FIGS. 1 and 2, which show recess 15 allowing a portion of board 6 to extend out of housing 3). Shieh also discloses the hard disk connecting/printed circuit board (6) having an IDE connector (10) configured to be removably connected an opposite IDE connector (7) of the hard drive. Although a male IDE connector is shown on the board in FIG. 1, as opposed to a female IDE connector, as claimed, it is well known in the art to rearrange parts as desired (see MPEP 2144.04I; *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950)).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reverse the male and female connectors on the connecting/printed circuit board of

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Sheih to provide greater flexibility of the system by allowing different types of hard disk drives to be connected to board.

Furthermore, Shieh discloses a female connector (7), e.g., a MC-36 connector, having a portion extending outwardly of a second side of the universal hard disk cartridge housing, and configured to be removably connected to a male connector, e.g., a MC-6 connector, of the interface cable (see FIGS. 2 and 3). As indicated in column 2, lines 44-46, various types of connectors may be utilized. As shown in FIG. 1, the IDE connector (10), and the second connector (e.g., MC-36 female connector) are connected to the hard disk connecting/printed circuit board (6). Shieh does not disclose the "universal" portable hard disk drive having a power input jack. Kaczeus, Sr. et al. disclose a portable data storage subsystem (see FIG. 3A) with a power connector or input jack (150).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the "universal" hard disk cartridge of Shieh with a power input jack, as taught by Kaczeus, Sr. et al. to supply power to the drive (12) of Sheih in the event sufficient power is not available through the cable connection.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shieh in view of Kaczeus, Sr. et al., as applied to claim 8, and further in view of U.S. Patent No. 5,324,204 to Lwee. Sheih, as modified, discloses the claimed "universal" hard disk cartridge for inserting a removable hard disk drive to an I/O port of a personal computer, except for the universal hard disk cartridge housing having an ejection button such that the removable hard drive is detached from the hard disk connecting board by pushing the ejection button. Lwee discloses a connection device including a portable hard disk drive housing 41 receiving a hard disk drive

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(not shown), including a upper ejection mechanism 3, wherein the ejection mechanism includes an ejection button or slider (44). See FIGS. 5 and 6 and corresponding specification.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the "universal" hard disk cartridge for inserting a removable hard disk drive to an I/O port of a personal computer of Sheih to include an ejection mechanism with an ejection button, as taught by Lwee, to easily remove the hard disk drive from the system without and to reduce possible damage to the connectors.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shieh in view of Kaczeus, Sr. et al., as applied to claim 8, and further in view of U.S. Patent Application Publication No. US/2002/0181147 to Tokunaga et al. Sheih, as modified, discloses the claimed "universal" hard disk cartridge for inserting a removable hard disk drive to an I/O port of a personal computer, except for the hard disk having an identification label. Tokunaga et al. disclose an adhesive label for a hard disk drive, which exhibits various information-indicating functions of the hard disk drive. See the ABSTRACT on the cover page of the publication.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the "universal" hard disk cartridge for inserting a removable hard disk drive to an I/O port of a personal computer of Sheih to include a label, as taught by Tokunaga et al. to visually provide information regarding the contents on the hard disk drive.

***Allowable Subject Matter***

Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and

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any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: Un the examiner's opinion, it would not have been obvious to a person of ordinary skill in the art to provide a the universal hard disk cartridge housing that has a length less than a length of the printed circuit board within the housing.

### ***Response to Arguments***

Applicant's arguments with respect to claims 8-11 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

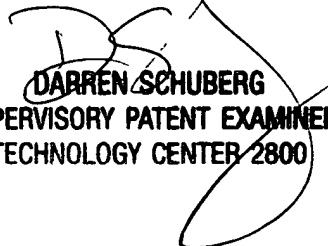
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Q. Edwards whose telephone number is 703-605-4214. The examiner can normally be reached on M-F (7:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (703) 308-4815. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 306-5511 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-9929.

aqe  
July 16, 2003

  
**DARREN SCHUBERG**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800